CHAPTER V.

HE public wagonette in which Mar- you. I know my falk are poor, and jorie was to Jour- that in other respects I'm not a match ney home ran dally for you, who have been brought up as between Dumfries a lady, but there will be neither peace and Annanmouth, a nor happiness for me in this world unsmall seaside vit- less you consent to become my wife," lage much frequented in summer for its sea-bathing; and passed within half a mile of Mr. Lore

raines abode, which was just six Scotch miles away from Dumicies itself. The starting place was the Bouny Jean Commercial Inn an establishment said to have been much parrantzed by the confession, she was quite pale, and aft past Burns during his residence in the with of Scotland; and hither Marjorje. her beautiful eyes as she replied: offer leaving her tutor, proceeded withcort delay.

The wagonette cas about to start: and Marjorie - sned to take her place. The vet -e was drawn by two powerful horses, and could accommodate a dozen passengers inside and one more on the seat of the driver; but today there were only a few goingthree farmers and their wives, a sailor on his way home from ses, and a couple of female farm servants who had come 15 to the spring "hiring." All these had taken their seats; but John Sutheriand atood by the trap waiting to hand Marjorie in. She stepped in and those her place and the young man found a sout at her side, when the driver took the reins and mounted to his wat, and with waves and smiles from the Misses Dalrympte, who kept the Honny Jean Inn, and a cheer from a very small loy on the pavement away they went

At last the vehicle reached the gross-roads where John and Marjorie were to alight. They leapt out, and parened their way on foot, the young man carrying a small hand-vallee, Marjorie still holding her school books underneath her arm.

Presently they came to a two-arched tilize which spanned the Annan. They caused just above the keystone. yearng man rested his vallee on the mossy wall, and both looked thoughtfully down at the flowing attento.

"It's many a long year. Marjorie, stace we first stood here. I was a barefooted cellant, you were a wear scarce able to run; and now I'm a man, and yearn almost a woman. Yet here's be Annae beneath us, the same asver and it will be the same when wa're both old-always the same.

Marjorie torned her head away, and mier eyes were dim with tears.

Come away," she autit: "I rennor ar to look at it! Whenever I watch Ing Annan I seem to see my mother's awned face looking up at me out of Con quiet water:

I The young man drew closer to her,

and gently touched her hand. Duty greet, Marjorie!" he red softly:

Grams with God." Yes, Johnnie, I ken that," answered Pia ziri in a broken voice; rad, and, to have neither kith nor kin. And to remember the way my mother led-ay; and not even to be able to ners her name! Whiles I feel very

bassome, when I think it all o'er." 1 And no wonder! But you have hose that love you dearly, for all that, There's not a lady in the country more trought of their gourself, and wherever tour bonny race has some it has

cought confort." As he spons he took her hand in his Twn, and looked at her very foudly; per her own gaze was far away; fuling her wistrut thoughts.

You're all very good to me." of presently, "Mr. Lorraine, and Sola-Con, and all my friends; but, for all Yest. I miss our own kith and kin? He bent his tace close to here, as he

urmed Some day, Marjorie, you'll have a 1 and kin of your own, and then

I He paused, iduating, for the clear, audfast eyes were suddenly turned

if upon him case. What do you mean. Johnnie?" I mean that you'll marry, andfirightness broke through the cloud.

d Mardorle smiled. Marry? Is it me? It's early in the ay to think of that, at seventeen?" Other young bases think of it, Marcrie, and so must you. Our Agnes arried tast Martinmas, and she was

ily a year older than yourself." Muriorle shook her head, then her - grew and again as her eyes fell

est Annan water. i m machody's bairn," she cried.

cad shall be nachody's wife, John foun't say that, Marjorie,"

ered Sutherland, still holding her and and pressing it fundly. 'There's re that loves you dearer than anyug else in all the world.

she looked at him steadfastly, while face flushed scarlet.

I know you tovo me, Johanio, as if a were my own brother.

More than that, Marjoris-more, a smand times!" the young man conund passionately. "Ah! it has been my mind a thomand times to tell how much. Ever since we were itte lase and tad you've been the one sought, and dream of my life; and if I and placed his hand affectionately on the old man's sanulder. "It's yoursel', my lad! I ken you noo,

| I've striven hard and hoped to become

a painter, it has all been for love of

As he continued to speak she had

become more and more surprised and

more surprised and startled. The

many people knew; but which she

herself had never suspected, came upon

"Don't talk like that! You're not

serious! Your wife! I shall be 'nac-

body's wife,' as I said, but surely, sure-

growing pale in turn. 'Til work day

and alght: 172 neither rest nor sleep.

until I have a home fit for you! You

you care for me, and will make me

hear you talk as you have done. You

nearer and dearer. Marjorie, speak to

"Angry with you; Johnnie?" she is

plied, smiling again, and giving him

both hands. "As if I could be! But

you must be very good, and not speak

She disengaged herself and moved

"I know what it is," he said sadly,

as they went on side by side together.

You think I'm ton poor, and you would

She turned her head and gazed at him

"Oh, how can you think so hardly of

me? I love your mother and father as

if they were my own; and as for your

being poor. I shouldn't like you at all

if you were rich. But," she added gent-

ly, "I like you as my brother best,

from me, it would break my heart."

What nonsense you talk!" she ox-

er man would care. If I were twenty,

it would be time enough to talk like

that; but at seventeen-oh, Johnnie,

"Tell me one thing," he persisted:

"I don't like any one half so well.

"Then I'll blde my time and wait."

By this time the village was in sight,

and they were soon walking along the

main street, which was as sleepy and

door not a soul was to be seen; but the

landlord's face looked out from behind

the window-pane with a grim nod of

greeting. A few houses beyond the

inn; Sutherland panied close to a small,

one-storied cottage, in front of which

was a tiny garden laid out in pansy

Marjorie nodded and smiled, and

without another word he opened the

garden gate, crossed the walk, and led

CHAPTER VE

S they entered the

door a foud hum-

ming sound came

mingled with the

Turning to the

right, they found

themselves on the

room, half parior,

half kitchen, at one

978 275

TODACONS.

upon their

to bares

Chreenhold

end of which was a large loom, whate

an elderly man, of grave and some-

what careworn aspect, was builty wear-

ing. Scated on a chair close to him

was a girl of about fourteen, dressed in

the ordinary petticcar and abort gown,

and reading aloud from a book. At the

other end of the room, where there was

an open ingle and a fire, an elderly

Suddenly there was an exclumation

perceive the entrance of the newcom-

"Johnnis!" she cried, holding out her

The young girl rose, smiling, book in

"Yes, here I am, mother; and I've

'Hon's a' wi' ye. Marjorie?" eried the

matron, holding out her hand. "It's a

remained quite atiff in his chair.

brought company, as you me?"

matron was cooking.

kinsing him fondly.

down by the fire!"

"Will you come in Marjorie?"

you almost make me laugh!"

except, except-Mr. Lorraine,"

You are sure, Marjorie?"

than you like me."

'Quite sure.

asked doubtfully.

the way into the cuttage,

value and followed her anxiously.

be ashamed of my folk."

in mild reproach.

me; at least tell me you're not angr. !"

'I do care for you, Johnnie: I care

'And now I want to be something

"Why not mine. Marjorie?" he exied.

ly not yours."

happy!"

of it again."

undden revetation of what

I feel your breath about me! What way did ye no write to tell us you were on the road hame?" "I was not sure until the fast me-

now apparent-he was stone blind.

ment that I could start so soon, but I jumped into the train last night, and down I come."

"Who's along wi' you?" asked the weaver, smiling. "I'll wager it's Mar-Jorle Annan!"

"Yes, Mr. Sutherland," answered Marjorie, crossing the room and joining the little group. "I met Johnnie in Dumfries, and we came home together.' The weaver nodded his head gently,

lowing aweetness. "Stand close, side by side," he said. 'while I tak' a long look at batth o'

and the smile on his face lightened into

"While you look at us!" echoed Mar-

her as a shock of sharp pain; so that orie in surprise. when he ceased, trembling and con-"Ay, and what for no? Dinna think, fused by the vehemence of his own because my bodlly een are blind, that I the light seemed to have gone out of

canna see weel wi' the een o' my soul! Ay, there you stand, lass and lad-my boy John and Marjorie Annan; baith fate, baith wi' blue cent John prood and glad, and Marjorie blushing by his side; and I see what you canna sec-n light all round and abune ye, coming out o' the golden gates o' Heaven! Stand still a wee and bark! Do ye hear nothing? Ay, but I can hear! sound like kirk-betts ringing far awa'."

shall be a lady-O! Marjorie, tell me As he spoke he sat with shining face, na if he indeed gazed on the aweet vision he was describing. Marjorle grew red as fire, and cast down her eyes; for you so much that I can't bear to for she was only too conscious of the old man's meaning, and, remembering have been like my own brother, and what had taken place that day, she felt constrained and almost annoyed. John Sutherland shared her uneasiness, and to divert the conversation into another channel, he apoke to his young sister, who stood smiling close by.

Marjorie, uneasy lost the old man's dreamy talk should again take an awkward turn, was determined to make her енсаре.

"Good-bye now, Mr. Sutherland," slowly across the bridge. He lifted his she said, taking his hand in hers, "I must run home; Mr. Lorraine will be expecting me."

And before any one could say a word to detain her, she was crossing the threshold of the cottage. Young Sutherland followed her as far as the garden gate.

"Marjorie," he said, "I hope you're not angry?"

"No, no," she replied; "but I wish your father would not talk as if we were courting, Johnnie. It makes me feel so awkward, and you know it is not true.

"If I could be always even that I "Old folk will talk," said John Suthshould not mind; but no, Marjorie, ertand, "and father only speaks out of you're too bonny to bide alone, and if the fullness of his heart. He is very any other man came and took you fond of year. Marjorie!"

"I know hat, and I of him-that to why it troubles me to hear him talk claimed smilling again, "As if any oth-

There was a moment's pause; then Sutherland sadly held out his hand. Well, good-bye, just now, I'll be coking ye up at the manne!"

'Good-bye!" she unswered. "Come 'tell me you don't like any one better

So she hastened away, while Suthertopking after THE STATE OF He had loved her so long and so rapidity to answer the practical stiently, and now for the first time in his life he began to dread that she a fact that owners of clay farms almight not love him in return. To him, just then, it seemed as if all the world was darkened, the blue sky clouded, descried as usual. Even at the tavern all the sweet spring weather touchd

with a wintry benne of fear. (TO BE CONTINUED.)

DRANGES WITH HORNS.

Some Strange Varieties of the Fruit tieners by the Chinese.

The Chinese are very fond of monstrous forms of fruit and flowers, and jected to the action of frost, it resumes any departure from the normal form is usually cherished and highly valued. in their gardens they have numerous forms of monstrous oranges some will produce fruit with points like by gers, and are known as the Hand Orange. Another form, says Mechan's Monthly, has a long horn projecting from the spex, and they are known as the Horn Orange. Another variety, which botanists have known by the name of Citrus aurantism distortum, bears a fruit in the resemblance of a cluster of sea shells. To one ignorant of the laws of vegetable morphology, these spells of wandering from the normal type are very mysterious, but when it is understood that all parts of the orange, as well as other fruits, are made up of what would have been teaves or branches changed so as to constitute the various parts of the seed and seed vessels, and that a very little difference in the degree of life energy will change them into various different parts that come to make up the fruit, the mystery in a great measure is solved. There are few branches | and flowers to much pleasure at the from the latter, who was the first to atudy of morphology.

A Gund Idea.

"I see from the war news," remarked arms; and in another moment she had Mrs. Sasges, "that several magazines folded her son in her emirace, and was have been captured."

'Yes," replied Mr. Snaggs. pose the object is to prevent the ed. hand; the man reased his weaving, but itors from filling their pages with way articles for the next twenty-five your Pittisburg Chronicle-Telegraph

The countries relatively richest in horses and horned catle are Argentina treat to see your bonny face. Sit ye and Uruguay, Australia has the most sheep; Seeds has the greatest number "is that my non?" said the weaver, of pigs to the population.

in a ueep, musical voice, but without FARM AND GARDEN. turning his head. His infirmity was

MATTERS OF INTEREST TO John Entherland walked scross the room, gave his sister a presing kies, ACRICULTURISTS.

> Some Up-to-Date Bints About Culliention of the Sell and Tields Thereof-Hortleulture, Villeniture and Flori-

> > Advantages of Drainage.



HE necessity of drataage is not to be determined by the quality of water which falls or flows upon the surface. nor upon the power of the sun to earry it off by evaporation; but upon the character of the sub-soil. If that is

of sand or gravel the water will pass off below by natural drainage; but if the sub-soil is clay or other impervious substance, the water is checked in its downward course and remains stagnant or bursts out upon the surface in the form of springs. Most of the prairie lands are of the latter character, and wherever such sub-soil exists the land will not only be improved by tile drainage, but it may be said that such drainage is absolutely essential to its proper development and culture. To question the necessity of the process is little less absurd than it would be to ask whether it would be improved by plowing, instead of making hills for corn in the prairie grass with a hoe or spade. All lands require drainage which, at any season, contain too much water-that is, which hold at any time of the year more moisture than is good for the crops, and causes them to suffer, either by freezing out in winter, or having their roots in water during the growing season. Drainage has been appropriately defined as " the art of rendering land not only so free from moisture that no superfluous water shall remain in it, but that no water shall remain long enough to injure or retard the healthy growth of such plants as are required for the sustenance of man or beast." There are some plants, as rice and cranberries, which require a wet soil, but most of those which are useful to man, are drowned by being overflowed for a short time, and are injured by any stagnant water about their roots. The soil of the prairies, in most cases, is underlaid with clay, which not unfrequently contains a mixture of metallic oxides, which cause it to form a substratum almost of the nature of rock, and known commonly among farmers as "hard pan." It is a common impression that clay is impervious to water, and that, therefore, a clay soil-and particularly if it has assumed the solid form of "hard pan" under the surface—can not be drained with tile, and especially if the tile is laid lower than the "hard pan," But that such land is not absolutely impervious is proved by the fact that it is very wet in the spring at almost any depth, while in the latter part of the summer it becomes dry and hard. How comes it to be soaked at any time, if water does not go into it? And how comes it dry, if water does not come out of it? The facts that clay will readily absorb a great deal of water, and that it may Mr. Lerraine will be so glad be subsequently dried, prove conclusively that it is not impervious to water, but they do not prove that water will pass through it with sufficient poses of drainage. It is nevertheless most invariably overestimate the difficulty in draining their land. They know that puddled clay is used for the

> its natural porous condition.- Anon. Origin of Perests

bottom of ponds, canals, etc., and is

nearly or quite impervious. But such

is not its natural condition, and it is

only reached by working and beating

it while wet, or, as in the case of the

hard pan subsoil, by continued pres-

kept in this condition except by being

constantly wet. If once dried, or sub-

sure from above. Nor can clay

The life of plants as well as of spimals began in the water, and from water plants of simple structure there gradually developed the forms fitted to thrive upon land, writes William J. Ropkins in Chicago Record. The first land plants of which we have evidence, although probably not the first that existed, were tern-like in churacter, As their number became greater the crowding forced each plant to reach out higher after the sunlight and the air. In this struggle for existence began that evolution of those most fitted to survive, which has resulted in the forms that we know to-day. Those which developed the tailest trunks conquered the shorter varieties and forced them either to die out completely or to occupy less favorable situations. The trees of the first great forests which became the beds of coal of the principal coal-forming period, were weak in structure, not far removed from the ferns, with pithy trunks, requiring much moisture and warmth. of botany which give the lover of fruits | They were not well adapted to propagate and spread, as their seeds were very small and incapable of withstanding rigorous conditions. From these forms there gradually developed the palms and trees somewhat resembling the present cone-bearing forms, or evergreens, this process of development continuing until in comparatively recent ages came the prevailing years of our modern forests. These may be divided into two great clauses the narrow-leaved, cone-bearing trees, or evergreens, and the broadtenved trees, which usually shed their saves in the autumn. All have a great

advantage over the earliest forms in

heights of 100 to 200 feet above the earth. The fight for place and existence is now shiefly between the evergreens and the broad-deaved or deciluous trees, and in this struggle the broad-leaved trees are so far superior that the evergreens have atready been driven to a great extent to the loss temperate, cold regions or to the drier and less favorable soils.

Methods of Sprending and Growth,-The discribution of forest trees depends not only upon the characteristies of the particular kind and its adaptability to the soil and climate, but also upon the chance of distribution of the seed and the provision against its destruction by animals. Many trees are subject to the depredations of various insect enemies which may prevent seeding or may even destroy the tree; and the seeds of most trees form a more or less palatable food for birds or beasts. Some trees better protected than others against these chances of destruction and the better protected trees stand a correspondingly better chance of increasing in numbers and aurpassing the other kinds. If the squirrels or the wild pigs find the nuts of the white onk sweeter and more wholesome than those of some other cans the standing white oaks will leave few if any descendants and will eventually amappear, while the red caks flourish. In entering upon new ground the trees having the lightest seeds will be the first to take possession, their seeds being carried to greater distances than those of the others. The light seeds of the willow or the seeds of the maple, which, although heavier, have upon them wing-like attachments, will enable their kind to far outstrip the nutbearing trees, like the walnut, hickory and oak. These heavy-seeded trees are limited in their reproduction, practically to the distance at which a nut falls to the ground or to the chance distribution by the forgotten hourds of the squirrel. By the swiftness of their march the light-seeded plants will thus more quickly reach regions where the rainfall is just sufficient to furnish the roots enough moisture or the growing season is just long enough to enable them to mature the wood of each year's growth. Beyond this point they cannot live. The heavy-seeded forms are plodding surely along behind them and in the final struggle the trees best adapted to the soil at any given locality will endure by the overwhelming of the others,

Pall Bys. There are a few crops that the American farmer can use more profitably than this. When It is sown early in the fall and the weather is favorable for the plant, it affords a great amount of pasture for calves, colts or pigs, writes S. Blanchard in Journal of Agriculture. In much of the weather during the fall when pastures are short, the cows can be turned upon the land to feed, and that will make the wife smile with joy when she goes to town with her well-filled jars or pails of butter. The farmer, too, will smile with pleasure when he beholds his calves, colts and all other stock entering upon the winter in such fine condition. During much of the winter, when they are turned out of their yards they will start at once for the rye field. In fact, it can be pastured nearly all winter when the ground is not covered with snow. It can also be pastured late in the spring, and when the stock is all removed will often spring up if weather is favorable and afford to the farmer a fair crop of grain. Or the field can be plowed up in the spring and planted to corn or some other crop. The fall plowing will have made the land more mellow for any spring crop. All farmers who have fields that can be utilized in this way should not fail to sow rye. Years ago many of the farmers in Kansas pastured their wheat fields when not covered with snow. Some thought it was no detriment to their crops while many question the utility of the practice. But rye is one of our hardiest grains. Drought does not affect it sa it does wheat or oats.

Mechanical Effects of Drainage.-The mechanical effects of drainage are to deepen the soil and promote its more thorough pulverisation. Its first effect is to dry its surface soil by drawing out of it all the surplus moisture, ac that in early spring or late autumn it may be worked with the plow as advantageously as at midsummer. A wet soil can never be properly pulverized. and the plowing or working a clay soil. or even a heavy toam, when wet, tends only to puddle it and render it less pervious to water and sir. Rain water contains a great quantity and variety of fertilizing substances, and it depos-Its them in the soil during its passage through it. Both these facts are perceptible to the senses without resorting to chemical tests.

Outlet of Drains.-No portion of a system of drainage demands more careful consideration than the outlet. It is, of course, essential that it should be enough lower than any portion of the lands that are to be drained by it to admit of sufficient fall for the passage of water from the heads of its most disrant tributaries. Yet it must be high enough above the level of whatever water it empties into to prevent danger of its being overflowed and the drainage water dammed tack in the pipes.

Wheat King of Argentina.-The wheat king of the world belongs to Argentina. He is an lialian emigrant named Guazone, and his broad nores are situated in the south of the province of Eucase Aires. His crop occuples an area of 55,270 acres. He numbers his workmen by the thousand, and their strong trunks, capable of sup-porting a great weight of branches and tenves and enabling them to attain trucks with his grain.—Ex.

A new and distinct branch of industry is rapidly being developed on the Pavific slope, says a contemporary. It promises to speedily begome of national importance and to relieve the people from all danger of being aublected to deception and fraud in one important article of sood supplies. Experts of the department of agriculture who have been investigating the matter have been astonished at the rapldity with which the industry is being developed and have made glowing reports of its future possibilities. At the present time there is being imported annually into the United States 1,000,-000 gallons of olive oil. It comes here from Italy and Spain, though the latter country is rather niggordly, with its exports, consuming nearly all it produces. The annual production of the iberian peninsula le 70,000,000 gallons. of which 60,000,000 are consumed at home. If the people of the United States consumed olive oil as do the Spaniards 180,000,000 gallons would be required to supply the domand here. What we do get from abroad is by no means an Al article. Analysis made by the agricultural department of that found on the market has proved that large quantities of it is nothing more than cotton seed oil or peanut oil lab-

Office Culture and Otton Oil.

eled and sold as pure olive oil. No necessity exists for the people submitting to any such imposition. The United States, instead of being an importer of olive oil, should be a large exporter. It is likely to become so in the not far distant future. The investigations referred to show that no better olive-producing soil exists in the world than is to be found in this country. In California there is a territory from 600 to 700 miles long and from 30 to 125 miles wide which is particularly well adapted to olive culture. In addition extensive sections have been found in South Carolina, Georgia, Florlda, Alabama, Mississippi, Lousiana, Texas and parts of Arzona in which the olive might be successfully culti-

vated.

In illustration of how olive eniture is being developed on the Pacific slope it may be said that from 500,000 to 500 -000 olive trees are being planted in California annually. In seven years from the time of planting these trees should be bearing fruit. After they once begin they continue yielding for centuries. A good tree in its prime will produce 250 gallons of oil a year. There is no reason why the territory described, in this country, should not produce 140,000,000 gallons annually. the present market value of which would be \$240,000,000.

Clean Wheat-

There is no excuse for the presence of rys, cockle or chess in wheat at harvest-time. It is not always possible to have absolutely clean seed, and wood-seeds are in the soil, but it is practicable to clean the standing grain when these weed pests appear. shoots up much higher than the wheat, and cockle has a blossom easily seen. Taking two drill widths at a through, a man can pass over an acre of wheat very quickly, clipping off the heads or blossoms of these undesirable plants We have too much thoroughbred cockle in the country. The fanning-mills take out the lighter and smaller grains of cockle, but too often leave the largest grains in the seed. In this way we have been raising the standard for cockle until some of it is as heavy as wheat-grains. It, together with rye and other flith in wheat, can be wholly eradicated by a little care before wheat harvest. Lowlands often have some docks in the wheat, and seed is ripened before harvest. Getting into the manure, they are carried back to cultivated fields. A watch should be kept for these, and an ounce of prevention saves the cost of a pound of cure.- Ex.

> Winter Shrubbery. Anyone planting a lawn or shrubs

should first of all consider how to have it an all-round-the-year lawn, Most shrubberies are pretty only in the spring, but it is possible to have the shrubbery showy, bright and cheering. even in winter. The best winter shrubs are the barberries, including the English sort, which has become naturalized in many of our states, the high bush cranberry and the red-barked dogwood. This last has fire-red bark all winter, and when it is ten years old will cover a space twenty feet in diameter in moist soil. It is grand for winter. The High Bush cranberry is always beautiful, nowering to May, and in July and August is covered with yellowish red berries, which turn deep crimson in October, and remain on the bush till spring. But for all bushes for winter give me a large barberry. The berries do not lose their brilliancy with any amount of freezing. For early winter by all means and the American Euonymus. All the above shrubs can be found in our woodland edges,-Vick's Magazine for August,

The most expensive product in the world is said to be charcoal thread, which is employed for incandescent lamps. It is, for the most part, manufactured in Paris, and comes from the hands of an artist who desires his name to remain unknown in order to better protect the secret of the manufacture. The product sells at from \$8,000 to \$12,000 per pound, according to the kind of lamp that is to be sup-

Bisulphide of Carbon for Ants,-Those who are annoyed with ants on their lawns can get rid of the pests by taking a sharp stick and making holes in or near the ant hills, and pouring into them about two tablespoonsful of bisulphide of carbon, piessing the soil over the hole at once to prevent its evaporation. The fumes of the binul-phide will penetrate the soil and kill every insect—Ex.

Do not cultivate the orchard in the